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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Application Number: 10/631,068
Filing Date: July 31, 2003
Appellant(s): CHEN ET AL.

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For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 04/07/2009 appealing from the Office action mailed 01/26/2009.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

2003/0027122	Stansvik	02-2003
5,525,060	Loebner	06-1996
2001.0019329	Kobayashi	11-2001
5,873,111	Edberg	02-1999
2003/0180699	Resor	09-2003
6,022,221	Boon	02-2000
7,367,808	Frank	06-2008
2002/0151366	Walker	10-2002

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 4, 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stansvik US 2003/0027122, in view of Edberg 5,873,111, in view of Kobayashi 2001/0019329 and further in view of Loebner 5,525,060.

Claims 1 and 14: Stansvik provide a teaching of a computer-implemented method for reviewing vocabulary comprising of: using a computer and a graphical user interface on a display connected to a computer and responsive to a user selecting a chapter from a plurality of chapters in a text book (see Stansvik paragraph 70), displaying a plurality of vocabulary word from a chapter (see Stansvik paragraph 45), displaying a vocabulary word in the question language and responsive to the user inputting an answer in the answer language, determining if the answer is a correct answer (see Stansvik FIG.5). Stansvik also provided a teaching if the answer is a correct answer is performed by determining whether the vocabulary of the word and the answer both match an entry in dictionary encoded (see Stansvik paragraph 57).

However, Stansvik is silent on what kind of encoding used in the dictionary. Edberg provide a teaching in the background of the invention that an electronic dictionary is better served when implemented using the Unicode encoding (see Edberg '111 col. 2:7-25 and col. 3:9-42). Therefore, one of ordinary skilled in the art would have been motivated to use Unicode as an encoding system of the word in the dictionary, because Unicode encoding would have allow for a better representation of different character/symbol that is unique of each particular language (see Edberg 2:7-25).

Stansvik discloses the claim invention except for the limitation of a user selecting a question language from English, Simplified Chinese, Traditional Chinese and Pin Yin and the limitation of a selecting the answer language from English, Simplified Chinese, Traditional Chinese and Pin Yin. However the Loebner reference provides a teaching a user selecting a question language from English, Simplified Chinese, Traditional Chinese and Pin Yin and the limitation of a selecting the answer language from English, Simplified Chinese, Traditional Chinese and Pin Yin (see col. 3:5-37). Therefore, it would have been obvious to include the feature of having English, Simplified Chinese, Traditional Chinese and Pin Yin in order to facilitate the teaching of Chinese language and the variation in its writing system (see Loebner col. 1:57-67). Stansvik fail to provide a teaching on responsive to the vocabulary word or the answer being in Simplified Chinese, translating the vocabulary word or the answer into Traditional Chinese by accessing a Simplified/Traditional Chinese database. However, Kobayashi provide a teaching on responsive to the vocabulary word or the answer, translating the vocabulary word or the answer into Simplified Chinese by accessing a Simplified/Traditional Chinese database (see Kobayashi Paragraph 91 and 46 and FIG. 3). Therefore, it would have been obvious for one ordinary skilled in the art to include the feature of translating the vocabulary word or the answer into Simplified Chinese by

accessing a Simplified/Traditional Chinese database, as taught by Kobayashi, in order

to show the student the characterization of Chinese words using the traditional Chinese

or simplified Chinese.

Specifically on claim 14. It also obvious to one of ordinary skill in the art at the time of

the invention to automate, the selection of a question language from English, Simplified

Chinese, Traditional Chinese and Pin Yin and the limitation of a selecting the answer

language from English, Simplified Chinese, Traditional Chinese and Pin Yin using a

graphical user interface, since it has been held that broadly providing an automatic

mean to replace a manual activity which accomplished the same result involves only

routine skill in the art. In Re Venner 120 USPQ 192.

Claims 4 and 17: Stansvik provided a teaching of displaying a statistic regarding the

user's performance in answering plurality of question (see FIG. 9 and paragraph 37,

72).

**Claims 11 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over
Stansvik US 2003/0027122, in view of Edberg 5,873,111, in view of Kobayashi
2001/0019329, in view of Loebner 5,525,060 and further in view of Walker
2002/0151366**

Claims 11 and 24: Stansvik fails to provide the teaching of changing the font size of

the characters displayed on the graphical user interface. However the Walker reference

provides a teaching on changing the font size of the characters displayed on the

graphical user interface (see paragraph 69). Therefore, it would have been obvious to

include the feature of changing the font displayed on the graphical user interface, as

taught by Walker et al, in order to suite the user's preference (see paragraph 5).

Claims 5-6 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stansvik US 2003/0027122, in view of Edberg 5,873,111, in view of Kobayashi 2001/0019329, in view of Loebner 5,525,060 and further in view Resor 2003/0180699

Claims 5-6 and 18-19: Stansvik fails to provide a teaching on calculating the probability factors of vocabulary words, wherein the probability factors determine the probability (or frequency) that the vocabulary word appear in question (or will be asked in a question).

However, the Resor reference provides a teaching of the probability factors of vocabulary words, wherein the probability factors determine the probability (or frequency) that the certain problem appear in question (or will be asked in a question) [see paragraph 354 and 189]. Therefore, it would have been obvious at the time of the invention for one of ordinary skilled in the art to include the features of on calculating the probability factors of vocabulary words, wherein the probability factors determine the probability (or frequency) that the vocabulary word appear in question, as taught by Roser, in order to

Claims 8-9 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stansvik US 2003/0027122, in view of Edberg 5,873,111, in view of Kobayashi 2001/0019329, in view of Loebner 5,525,060, in view Resor 2003/0180699 and further in view of Boon 6,022,221

Claims 8 and 21: The combination of Stansvik and Resor do not provide a teaching wherein responsive that the answer is correct, decrementing a probability factor for the vocabulary word. However, the Boon reference provides a teaching wherein responsive that the answer is correct, decrementing a probability factor for the vocabulary word

(see col. 5:35-45_"... less frequent..." i.e. decreasing the probability factor of its appearance). Therefore, it would have been obvious to one of ordinary skilled in the art to include the feature of wherein responsive that the answer is correct, decrementing a probability factor for the vocabulary word, as taught by Boon, in order to allow a more effective memory retention learning method (see col. 3:5-15).

Claims 9 and 22: The combination of Stansvik and Resor do not provide a teaching wherein responsive that the answer is correct, decrementing a probability factor for the vocabulary word. However, the Boon reference provides a teaching of wherein responsive that the answer is correct, decrementing a probability factor for the vocabulary word (see col. 11:10-20 "... appear more frequently..." i.e. increasing the probability factor). Therefore, it would have been obvious to one of ordinary wherein responsive that the answer is correct, decrementing a probability factor for the vocabulary word, as taught by Boon, in order to allow a more effective memory retention learning method (see col. 3:5-15).

Claims 10 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stansvik US 2003/0027122, in view of Edberg 5,873,111, in view of Kobayashi 2001/0019329, in view of Loebner 5,525,060, in view Resor 2003/0180699 and further in view of Frank US 7,367,808

Claims 10 and 23: Stansvik fails to provide a teaching where is responsive to a determination that all vocabulary words in a chapter have a probability of one, indicating that the chapter is completed. However, Frank provides a teaching where a certain cut-off score, indicates that the training is completed (see Frank col. 14:40-50). The examiner interprets the limitation of to a determination that all vocabulary words in a chapter have a probability of one as equivalent as the cut-off scores that used in the Frank reference. Therefore, it would have been obvious at the time of the invention for

one of ordinary skilled in the art to include the features of on if the response to a

determination that the answer is correct, decrementing probability factor for the

vocabulary word and if the response to a determination that the answer is incorrect,

incrementing probability factor for the vocabulary word, as taught by Frank, into the

combination of Stansvik and Kobayashi because it would enable the system to

indication where the stop the training (Frank col. 14:50-55).

 (10) Response to Argument

With respect to appellant's argument on the rejection under 35 U.S.C 103(a) on

claims 1, 4, 14 and 17 as rejected over Stansvik, Edberg, Kobayashi and

Loebner.

      The appellant argues that the combination of Stansvik, Edberg, Kobayashi and

Loebner references fail to provide the teaching for the limitation of "responsive to the

user selecting ... a question language from English, Simplified Chinese, Traditional

Chinese or Pin Yin and answer language from English, Simplified Chinese, Traditional

Chinese or Pin Yin. The appellant argues that the limitation requires a user to select

an answer language and a question language and that the combination of references

failed to show teaching for this limitation. The examiner respectfully disagrees. The

examiner would like point out that the Stansvik reference already provides a teaching

where the user can select a question and answer language (see Stansvik paragraph 48-

49 and FIG 5B). In this particular case, the figures and citation of the Stansvik

reference shows where the user can select computer to display a question language in

English and the answer language in Spanish (see Stansvik FIG 5B 82, 86, 90 "The

House" as question language and FIG 5B item "La Casa" as the answer language) as

well as the reverse scenario where the Spanish language is the question language and

the English language is the answer language (see Stansvik FIG 5B 92, 94, 96 "La Casa"

as the question language and the "The House" as the answer language). The Stansvik reference fails to teach the limitation of "the language of the answer and question language is selected from Simplified Chinese, Traditional Chinese or Pin Yin". However, the Loebner reference provides the teaching that the Simplified Chinese, Traditional Chinese or Pin Yin are writing systems associated with the Chinese language and have been observed in the past (see Loebner col. 1:30-35). The Loebner reference also identify that it would have been necessary for a student trying to learn the Chinese language to learn all three different type of writing system (orthodox/traditional Chinese, simplified Chinese and pin yin) since all three different writing system are widely used in the Chinese language [see Loebner col. 1:45-2:5]. In practice, the combination of the Stansvik with Loebner will only change the type language and writing system that can be displayed in Stansvik's display device. Since the Stansvik reference already provide a teaching of providing foreign language lesson (see Stansvik paragraph 45 and 69), the combination of Stansvik and Loebner will only extend the amount of the language training that the Stansvik reference is capable of.

The appellant argues that the combination of Stansvik, Edberg, Kobayashi and Loebner references fail to provide the teaching of "... *wherein a determination if the answer is a correct answer is performed by determining whether the vocabulary word and answer word match an entry in a Traditional Chinese/Pin Yin/ English dictionary in Unicode*". The examiner respectfully disagrees. The Stansvik reference already provides a teaching a determination if the answer is a correct answer is performed by determining whether the vocabulary word and answer word match an entry in a dictionary (see paragraph 57). While it would have been inherent that some sort of encoding system would be needed to implement the electronic dictionary, as disclosed by Stansvik, the Stansvik reference do not explicitly disclose what type encoding system used in the reference. Additionally, the Stansvik reference also fails to teach where the

dictionary is a Traditional Chinese/Simplified Chinese/Pin Yin/English dictionary. The Edberg reference provides a teaching that the Unicode is the computing industry standard that allow consistent display of a language writing system (see Edberg col. 1:55-2:10) and the Kobayashi reference shows that how to encode the Chinese writing system using Unicode encoding (see Kobayashi paragraph 91 and 46 and FIG. 3). In short, the examiner argues that each of the reference in the combination will describe to one of ordinary skilled in the art where the modification should be implemented, what information should be included in the system modification and how those new information should be encoded in the Stansvik system. In this particular case, the base Stansvik reference provide a teaching of an electronic dictionary ready for improvement by adding an additional world language. The Loebner reference provides a teaching of what kind of information that can be added in the electronic dictionary of Stansvik, namely, the addition Chinese language with its unique writing system. Lastly, the Edberg and Kobayashi reference provide a teaching how the Chinese writing system can be encoded in an electronic/computer dictionary. The appellant is correct in the observation that if the reference are to be viewed individually then none of the reference on its own would provide the teaching of "*a determination if the answer is a correct answer is performed by determining whether the vocabulary word and answer word match an entry in a Traditional Chinese/Pin Yin/ English dictionary in Unicode*". However, one cannot show non-obviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Lastly, the appellant also argues that the combination of the Stansvik reference with the Loebner reference would produce an inoperative device since the combination would no longer allow the tracking of a user's progress. The appellant argues that the

to make proposed combination one of ordinary skilled in the art would have to replace
Stansvik's question and answer sequence with Loebner's teaching of displaying one
language at a time. The appellant also argue that the user would no longer be required
to answer the Stansvik question. The examiner respectfully disagrees. Firstly, the
examiner never suggested that such modification be done. Secondly, the only
modification suggested by the examiner is to add the language that would be available
in the Stansvik system. As explained earlier the Stansvik reference already provide a
teaching of a system that is able to ask vocabulary question in one language and enable
to student to answer in another language (i.e.: Spanish-English question-answer system
and English-Spanish question-answer system). The modification that one of ordinary
skilled in the art would be required to do would be concentrated on the display system
in order to enable the system to display different Chinese character/writing system and
the addition of Chinese character information in Stansvik electronic dictionary. The
modification to add other language lesson other than Spanish language lesson can be
found in the Stansvik reference (see paragraph 69). Moreover, the Stansvik reference
also teaches that the scoring and performance tracking system can also be used in
monitoring various learning module and language learning module (see paragraph 71-
72). Since, the modification to add another world language has already been expected
by the Stansvik reference and the fact that the Stansvik scoring and performance
tracking system can be used to track vocabulary progress of a language; the examiner
argues that the combination of Stansvik and Loebner reference would not cause the
Stansvik reference to be inoperable.

As such the examiner takes the position that the rejection on claims 1, 4, 14
and 17 under 35 U.S.C 103(a) as rejected over the combination of Stansvik, Edberg,
Kobayashi and Loebner are warranted and should be maintained.

With respect to appellant's argument on the rejection under 35 U.S.C 103(a) on

claims 5, 6, 18 and 19 as rejected over Stansvik, Edberg, Kobayashi, Loebner

and Roser.

The appellant argues that the Roser reference fails to provide a teaching of "...

calculating a probability factor for the plurality of vocabulary words and wherein the

probability factors determines a probability that the vocabulary will appear in a question"

The appellant argues that the Resor reference fails to teach the teaching of vocabulary

words. The appellant also argues that the Resor reference is only directed toward

arithmetic teaching and not vocabulary/language teaching. The examiner respectfully

disagrees. The examiner would like to note that both the Resor and Stansvik reference

are references that present question to be displayed to the student. The Stansvik

reference is silent on exact algorithm on how a particular is selected and displayed to

the student. The Resor reference provides a teaching of selecting a question based on

the relative probability that is associated to each problem (see Resor paragraph 354).

The examiner also notes that the MPEP specifically allows the use of similar of known

technique to improve similar devices (see MPEP 2143). Since, both the Resor and

Stansvik reference are similar devices (i.e.: electronic device that select and present

question to the user) the examiner takes the position that the inclusion of the Resor

algorithm to the Stansvik device would the modification will provide an improvement in

the base reference. In this particular case, the Resor reference teaches a prior art of

method of selecting a particular question using a known technique, namely, the

technique of using a probability factor to select which question to be displayed to the

user. Thus, it would have been recognized by one of ordinary skill in the art that

applying the known technique taught by Resor to the education system of Stansvik

would have yielded predicable results and resulted in an improved system, namely, a

system that would select a question that is appropriate to the capability of the student

(see Resor paragraph 355 and 356). One of ordinary skilled in the art would have been

motivated to make the Stansvik and Resor combination since the Resor reference

teaches that the probability based selection system is more efficient and less time

consuming in selecting the appropriate problem for the user (see paragraph 356).

The appellant also argues that the combination of Stansvik, Edberg, Kobayashi,

Loebner and Roser is not valid since the examiner has not shown legal motivation to

combine. The examiner respectfully disagrees. The examiner's motivation of combining

the Resor reference with the Stansvik reference is taken explicitly from the Resor

reference, namely, to increase the efficiency of the problem selection algorithm (see

Resor paragraph 356). The examiner also notes that the type of modification suggested

the use of similar of known technique to improve similar devices, in the rejection and

this appeal brief has been identified to be a proper rationale to support an obviousness

type rejection [See MPEP 2143 – Exemplary Rationale (C)].

Therefore, the examiner takes the position that the rejection on claims 5, 6, 18

and 19 under 35 U.S.C 103(a) as rejected over the combination of Stansvik, Edberg,

Kobayashi, Loebner and Resor are warranted and should be maintained.

With respect to appellant's argument on the rejection under 35 U.S.C 103(a) on

claims 8, 9, 21 and 22 as rejected over Stansvik, Edberg, Kobayashi, Loebner,

Roser and Boon.

The appellant argument is based on the same argument presented on claims 1

and 14. The examiner takes the position the rejection of claim 1 and 14 are warranted

and should be maintained. Consequently, the same arguments applied on claims 1, 14

are also applicable and the rejection of claims 8, 9, 21 and 22 are also warranted and

should be maintained.

With respect to appellant's argument on the rejection under 35 U.S.C 103(a) on

claims 10 and 23 as rejected over Stansvik, Edberg, Kobayashi, Loebner, Roser,

Boon and Frank.

The appellant argues that the combination of Stansvik, Edberg, Kobayashi,

Loebner, Roser, Boon and Frank fails to provide a teaching for the limitation of *"wherein*

responsive to a determination that all the vocabulary words in a chapter have a

probability factor equal to one indicating the chapter is complete." The examiner

respectfully disagrees. As explained in the rejection above, examiner finding of

obviousness is based upon the examiner's determination that what the appellant refer

as "probability factor" and "probability factor equal to one" are analogous to the term

"score" and "cut-off score" in the Frank reference. The examiner points to the

appellant's specification that explains on the probability factor is calculated (see

appellant's specification page 11 line 20 - page 12 line 5). The appellant's specification

taught that the probability factors are increased or decreased based on the student's

correct and incorrect answer question. Similarly, a score is increased or decreased

when a student submit a correct or incorrect answer to a question. The appellant's

specification also taught that when probability factor is equal to one to all the system

will stop presenting additional question (see IFG 4 item 328 and page 13 line 15-23).

Similarly, the Frank reference also taught of a "cutoff" score that when reached will stop

the system from asking will stop presenting additional question (see Frank FIG 4B item

518 col. 7:55-65 and col. 14:40-55). Since, the term "probability factor" in the claim

behaves in a similar manner with the "score" term in the Frank reference, the examiner

consider these two terms to be analogous and identical to each other. As such, the

examiner concludes that the "probability factor equal to one" to be analogous to the cut-

off score that is used and suggested by the Frank reference. As such, the examiner

takes the position that the combination of Stansvik, Edberg, Kobayashi, Loebner, Roser,

Boon and Frank f provide a teaching for the limitation of "*wherein responsive to a*

determination that all the vocabulary words in a chapter have a probability factor equal to

one indicating the chapter is complete."

The appellant also argues that the combination of Stansvik, Edberg, Kobayashi,

Loebner, Roser, Boon and Frank is not valid since the Frank reference constitutes a

non-analogous art. The appellant argues that the Frank reference is not from the same

field of endeavor from the claimed invention and the teaching of Frank is not

particularly pertinent to the problem as specified by the appellant. The examiner

respectfully disagrees. Firstly, both the appellant's and Frank reference resides in the

same general area of electronic/computer testing. Both the appellant's claimed

invention present question to the user and receives answer to the question from the

user. The appellant also argues that the field of employee retention and

Chinese/English vocabulary are completely distinct from each other. The examiner

respectfully disagrees. Since, one can certainly point to at least one type of employment

that may require an employee to possess Chinese/English communication skill (e.g.: a

translator). In such particular case, the field of employee retention and vocabulary are

certainly very related. Lastly, the examiner would like to point out that the teaching of

the Frank reference is not used as an employee retention system in the rejection. The

examiner has shown that the Frank reference is only used to as a teaching on how the

score and cut score can be processed in an electronic learning system. As such, the

examiner argues that the field of endeavor in this particular case is not the vocabulary

testing suggested by the applicant; rather; the field of endeavor is the electronic testing

and scoring. As such, the examiner takes the position that the Frank reference and

appellant's claimed invention to be analogous art.

Therefore, the examiner takes the position that the rejection on claims 10 and 23 under 35 U.S.C 103(a) as rejected over the combination of Stansvik, Edberg, Kobayashi, Loebner, Resor and Frank are warranted and should be maintained.

With respect to appellant's argument on the rejection under 35 U.S.C 103(a) on claims 11 and 24 as rejected over Stansvik, Edberg, Kobayashi, Loebner, Roser and Boon.

The appellant argument is based on the same argument presented on claims 1 and 14. The examiner takes the position the rejection of claim 1 and 14 are warranted and should be maintained. Consequently, the same arguments applied on claims 1, 14 are also applicable and the rejection of claims 11 and 24 are also warranted and should be maintained.

(11) Related Proceeding(s) Appendix

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/R. J. U. /

Examiner, Art Unit 3715

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